ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH, /JW/

Approved for use through 05/31/2009, OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

25226A

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it contains a valid OMB control number Complete if Known Substitute for form 1449/PTO Application Number 10/722,929 Filing Date 11/26/2003 INFORMATION DISCLOSURE First Named Inventor Rynd STATEMENT BY APPLICANT Art Unit 1791 (Use as many sheets as necessary) Examiner Name Wollschlager

Sheet 1

of 6

Attorney Docket Number

			U. S. PATENT D	OCUMENTS		
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan	
		Number-Kind Code			Figures Appear	
		2,365,086	12/12/1944	Kamowski		
		3,574,644	4/13/1971	Olstowski et al.		
		4,301,040	11/17/1981	Berbeco		
		4,385,156	5/1/1983	Ingram et al.		
		4,996,109	2/26/1991	Krieg et al.		
		5,130,342	7/14/1992	McAllister et al.		
		5,550,170	8/1/1996	Trager et al.		
		5,679,718	10/21/1997	Suh et al.		
		5,719,199	2/17/1998	Wallace et al.		
		5,779,775	7/14/1998	Kuwabara		
		5,853,752	12/29/1998	Unger et al.		
		5,912,279	6/15/1999	Hammel et al.		
		5,993,707	11/20/1999	Chaudhary et al.		
		6,048,909	4/11/2000	Chaudhary et al.		
		6,093,752	7/25/2000	Park et al.		
		6.130,265	10/10/2000	Glueck et al.		

			IN PATENT DOCUM			
Examinar Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited	Pages, Columns, Lines, Where Relevant Passages	Te
		Country Codes -Number 4 -Kind Codes (if known)		Document	Or Relevant Figures Appear	,,,
		DE 199 07 663	8/24/2000	BASF		
		DE 199 10 257	9/21/2000	Schwenk		
		DE 2004 019708	11/17/2005	Stork et al.		
		EP 0 729 999	4/9/1996	Okisaki et al.		
		EP 0 863 175	9/9/1998	Hahn et al.		
		EP 01214372	12/28/2005	Duffy		

Examiner Signature	/Jeff Wollschlager/	Date Considered	12/30/2009

"EXAMINER Initial If reference considered whether or not clastion is in conformance with MREP 603. Draw time through clastion in a lin conformance and not considered. Include copy of this form with next communication to applicant." Applicants usingse classine designation number (policinal). See Nixed Codes of USPTO Patent Documents at https://www.number.org/niceal/. See Nixed Codes of USPTO Patent Documents at https://www.number.org/niceal/. See Nixed Codes of USPTO Patent Documents at https://www.number.org/niceal/. See Nixed Codes of USPTO Patent Documents at https://www.number.org/niceal/. See Nixed Codes of USPTO Patent Documents at https://www.number.org/niceal/. See Nixed Codes of USPTO Patent Documents (Nixed of Counter, Nixed of Counter, Nix

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JW/

PTO/SB/08a (04-09)
Approved for use through 05/31/2009, OMB 0651-0031
fredemark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known.

Complete in Known.

Attorney Docket Number

25226A

Substitute for form 1449/PTO		ompiete ii Known	
	Application Number	10/722,929	_
INFORMATION DIGGLOSUPE	Filing Date	11/26/2003	
INFORMATION DISCLOSURE	First Named Inventor	Rynd	Т
STATEMENT BY APPLICANT	Art Unit	1791	
(Use as many sheets as necessary)	Examiner Name	Wollschlager	

Sheet

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
		Number-Kind Code ^{1,8880})			Figures Appear
		6,133,333	10/17/2000	Chaudhary et al.	
		6,174,471	1/16/2001	Park et al.	
		6,197,233	3/6/2001	Mason et al.	
		6,213,540	4/10/2001	Tusim et al.	
		6,231,795	5/15/2001	Chaudhary et al.	
		6,242,540	6/1/2001	Crevecoeur et al.	
		6,340,713	1/22/2002	Gluck et al.	
		6,350,789	2/26/2002	Miller et al.	
		6,355,341	3/12/2002	Chaudhary et al.	
		6,362,242	3/26/2002	Gluck et al.	
		6,387,968	5/14/2002	Gluck et al.	
		6,417,240	7/9/2002	Park	
		6,420,442	7/16/2002	Dietzen et al.	
		6,521,672	2/18/2003	Gluck et al.	
		2001/0036970	11/1/2001	Park	
		2002/0041955	4/11/2002	Watanabe et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document Country Codes -Number 4 - Kind Codes (If Issoury)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	To	
		EP 0515125	11/25/1992	York			
		EP 0675918	9/27/2000	Reedy et al.			
		EP 0921148	2/23/2000	Eschenlauer et al.		Г	
		EP 0922554	6/25/2003	Eschenlauer et al.			
		EP 1 205 437	5/15/2002	Osawa			
		EP 1 209 189	5/29/2002	Kresta			

			A CONTRACTOR OF THE CONTRACTOR
Examiner Signature	/Jeff Wollschlager/	Date Considered	12/30/2009

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH to a WARD O STOTE 2009. (01-09)

U.S. Patent and Trademack Conc. U.S. DEPARTMENT OF COMMERCE.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete it Known		
				Application Number	10/722,929	
	JEODRAA.	TION D	ICOL COURT	Filing Date	11/26/2003	
			ISCLOSURE	First Named Inventor	Rynd	
S			APPLICANT	Art Unit	1791	
	(Use as I	nany sheets a	s necessary)	Examiner Name	Wollschlager	
Sheet	3	of	6	Attorney Docket Number	25226A	

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
	+-+		7440000	01	Figures Appear
		2002/0086908	7/1/2002	Chou et al.	
		2002/0121717	9/5/2002	Chaudhary et al.	
		2002/0155270	10/24/2002	Chaudhary et al.	
		2002/0168509	11/14/2002	De Simone et al.	
		2003/0082343	5/1/2003	Brucker	
		2003/0162852	8/28/2003	Chaudhary et al.	
	\perp	2003/0175497	9/18/2003	Kobe et al.	
		2004/0167240	8/26/2004	Burgun et al.	
		2004/0209782	10/21/2004	Zhang et al.	
		2005/0048276	3/3/2005	Wilson	
		2005/0112356	5/26/2005	Rynd et al.	
		2006/0148916	7/6/2006	Loh et al.	

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document Country Codes-Number 4-Kind Codes (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Тв	
		EP 620 246	10/19/1994	Algostat			
		EP 97/02457	10/10/2000	Glueck et al.			
		EP 99/04867	5/7/2002	Glueck et al.		1	
		WO 1999/047592	9/23/1999	Park et al.			
		WO 2000/034363	6/15/2000	Chaudhary et al.			
		WO 2000/034365	6/15/2000	Chaudhary et al.		Г	

Examiner		Date	10,00,000
Signature	/Jett Wollschlager/	Considered	12/30/2009

"EXAMINER Initial If reference considered whether or not clation is in conformance with MECE 903. Dow't the through clation in all conformance and not considered, include copy of this form with next communication to agriculture. Application surplused includes designation manuely copyrount, "Soc Observed Codes or USPTO Patent Documents at view. Usabling.org or MPEP 901.04. Easter Office had sussed the document, by the two-letter code (NRPC Standard ST.3). For dependence patent documents, the includation of the year of the regin of the Emperor must proceed the sessial number of the patent documents. What of documents, the includation of the year of the regin of the Emperor must proceed the sessial number of the patent documents. What of documents will be appropriated and the patent of the patent documents. What of some patent is sufficient to the patent documents. What of some patents is sufficient to the patent documents. What of some patents is sufficient to the patent documents. What of some patents is sufficient to the patent documents. What of some patents is sufficient to the patent document will be patent to the patent documents. The patents is sufficient to the patent document and the patent documents are documents. As in the patent of the patent documents are documents and the patents of the patents of the patents are patents. The patents are patents are patents and the patents are patents of the patents and the patents are patents of the patents and the patents are patents are patents and the patents are patents and the patents are patents and the patents are patents are patents. As a patent and the patents are patents are particularly as a patent and the patents are patents are patents are patents. As a patent and the patents are patents are patents and the patents are patents and the patents are patents are patents. As a patent are patents are patents are patents and the patents are patents are patents. As a patent are patents are patents are patents are patents are patents and the patents are patents

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH, /JW/

PTO/SS/08e (04-09) Approved for use through 05/31/2009, OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

	Under t	he Page	work Reduction Act of 1995, no persons		of information unless it contains a valid OMB control numb	
Substitute fo	r form 1449/PTO	,		Complete if Known		
			•	Application Number	10/722,929	
181	EODMATIO!	un	COL COLUDE	Filing Date	11/26/2003	
			SCLOSURE	First Named Inventor	Rynd	
S			APPLICANT	Art Unit	1791	
	(Use as many st	reets a:	s necessary)	Examiner Name	Wollschlager	
Sheet	4	of	6	Attorney Docket Number	25226A	

U. S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear			
miodio	1.0.1	Number-Kind Code ^{vess-})	IIIII-00-1111	Otto Document				
				*				
	\perp							
	1							

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures	Тє		
	_	Country Codes - Number 4 - Kind Codes (if known)			Appear			
		WO 2004/065461	8/5/2004	Lee et al.				
		WO 2004/067577	8/12/2004	McDonald et al.				
		WO 2004/078785	9/1/2004	Moad et al.				
		WO 2005/054349	6/16/2005	Rynd et al.				
		WO 2006/009945	1/26/2006	Hagerty et al.				
		WO 2006/009980	1/26/2006	Lin et al.				

			, , ,
Examiner Signature	/Jeff Wollschlager/	Date Considered	12/30/2009

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JW/

PTO/SB/08a (04-09) Approved for use through 05/31/2009. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE

16

Application Number 10/722,929 Filing Date 11/26/2003 First Named Inventor Rvnd Art Unit 1791

Complete if Known

STATEMENT BY APPLICANT (Use as many sheets as necessary)

Substitute for form 1449/PTO

5

Sheet

Examiner Name Wollschlager Attorney Docket Number 25226A

U. S. PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant			
		Number-Kind Code	-		Figures Appear			
	+-							
-								
	+	****						
			1					
	-							
	-			***				
	1 1							

Examiner Initials*	Oite No.1	Foreign Patent Document Country Codes -Number 4 - Kind Codes (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures	Te
		WO 2006/073712	7/13/2006	Loh et al.	Appear	
		WO 2008/005022	1/10/2008	Loh et al.		
		WO 97/31053	8/28/1997	Karande et al.		
		WO 98/03581	1/29/1998	Creazzo et al.		
		WO 99/31170	6/24/1999	Chaudhary et al.		$\overline{}$

Examiner	/ 1 - # 1M - N 1-1 /	Date	10/00/000
Signature	/Jeff Wollschlager/		12/30/2009
orgrana, o		Considered	12.00,2000

*EXAMINER Initial if reference considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional), 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Transietion is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete his form and/or suggestions for addicting this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 2231-4450, DO NOT SEND FEES OR COMPLETED FORMS TO TO TIAL SADRESS TO TIC Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/06b (04-09)

Approved for use through 05/31/2009, OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

	Under t	he Papar	work Reduction Act of 1995, no persons	s are required to respond to a collection of information unless it contains a valid OMS control re		
Substitute fo	or form 1449/PTO			Complete if Known		
				Application Number	10/722,929	
D.	EODMATIO!	u Di	COLOCUET	Filing Date	11/26/2003	
			SCLOSURE	First Named Inventor	Rynd	
S			APPLICANT	Art Unit	1791	
	(Use as many st	reets as	s necessary)	Examiner Name	Wollschlager	
Sheet	6	of	6	Attorney Docket Number	25226A	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), tills of the article (when appropriate), tills of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		International Search Report PCT/US2005/045291 dated 5/12/2006	
		International Search Report PCT/US2006/035056 dated 2/20/2008	
		International Search Report PCT/US2008/058543 dated 7/23/2008	
		Zhang, et al., Preparation and Combustion Properties of Flame Retardant SBA Copolymer/Graphite Oxide Nanocomposites, Marcromol, Mater Eng., March 2004, 289, 355-59.	
		Cassegneau, et al., Preparation and Characterization of Ultrathin Films Layer-by-Layer Self Assembled from graphite Oxide Nanoplatelets and Polymer, Langmuir, 2000, 16, 7318-24.	
		Guo-Hua Chen, Da-Jun Wu, Wen-Gui Weng and Wen-Li Yan; Dispersion of Graphite Nanosheets in a Polymer Matrix and the Conducting Property of the Nanocomposites; Polymer Engineering and Science, Dec. 2001, Vol 41, No. 12; pp 2148-54.	
		Pan, Y.X., Yu, Z.Z., Ou, Y.C., Hu, G.H.; A new process of fabracating electrically conducting nylon 6/graphite nanocomposites via intercalation polymerization, Journal of Polymer Science: Part B: Polymer Physics, 38, 1628-1633 (2000).	
		Xiao, P., Xiao, M., Gong, K.; Preparation of exfoliated graphite/polystyrene composite by polymerization-filling technique, Polymer, 42, 4813-4816 (2001).	
		Chen, G.H., Wu, D.J., Weng, W.G., Yan, W.L., Preparation of polymer/graphite conducting nanocomposite by intercalation polymerization, Journal of Applied Polymer Science, 82, 2509-2513 (2001).	
		Uhl, F.M. and Wilkie, C.A., Polystyrene/graphite nanocomposites: effect on thermal stability, Polymer Degradation and Stability, 76, 111-122 (2002).	
		Modesti, M., Lorenzetti, A., Simioni, F., Camino, G., Expandable graphite as an intumescent flame retardant in polyisocyanurate-polyurethane forms, Polymer Degradation and Stability, 77, 195-202 (2002).	
		Drzal, L.T. and Fukushima, H., Graphite nanoplatelets as reinforcements for polymers, Polymers Preprints (American Chemical Society, Division of Polymer Chemistry) 42 (2), 42-43 (2001).	

r	Examiner		Date	
- 1	Signature	/Jett Wollschlager/	Considered	12/30/2009

EXAMINER: Initial if reference considered whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.usoto.cov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WiPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Transfation is attached. This collection of Information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450. Alexandría, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.